

REMARKS

Applicant thanks the Examiner for the remarks and analysis contained in the Office Action. Claims 1, 12, 13 and 21 are amended. Claims 10 and 22 are cancelled. Applicant respectfully requests reconsideration of this application where claims 1-9 and 11-21 are currently pending.

Applicant does not have an official translation of the *Albrecht, et al.* reference. A machine translation obtained by Applicant's representative is attached as Exhibit A to this Response. Applicant recommends that the Examiner obtain an official translation from the United States Patent Office to clarify any potential issues that the Examiner sees regarding the application of the *Albrecht, et al.* reference to Applicant's claims.

Applicant respectfully traverses the rejection under 35 U.S.C. §103 based upon the combination of *Albrecht, et al.* and *Galazin, et al.* Even if the combination could be made, the result is not the same as the claimed invention. Independent claims 1 and 13 include a biasing member that biases the height holding device into a first, retracted position. The arrangement of *Albrecht, et al.* has the opposite. The spring 33 in Figure 3, for example, biases the piston pole toward the carrier disc 9, which is the opposite direction of the bias in Applicant's claims. Therefore, the proposed combination does not result in the claimed invention.

Independent claim 12, which has been rewritten in independent form without any other changes, includes a controller that determines when air pressure from within the air spring will be evacuated and controls the moveable portion. This cannot be considered obvious over the proposed combination because *Albrecht, et al.* never evacuates the air space 7. In fact, *Albrecht, et al.* teach using a pressure connection to set a level of the

pressure within the air space in order to hold a ramp at a selected height. *Albrecht, et al.* rely upon keeping the air space 7 pressurized to perform the intended function of that device. Accordingly, claim 12 is the opposite of what is taught by *Albrecht, et al.* and the claim cannot be considered obvious.

The same analysis applies to claim 21.

Applicant respectfully submits that this case is in condition for allowance.

Applicant's representative will be happy to discuss any issues regarding this application and can be contacted at the telephone number indicated below if the Examiner believes that a telephone conference will facilitate moving this case forward to being issued.

Applicant believes that an additional fee in the amount of \$86.00 is required for one additional independent claim. A check in the amount of \$86.00 is enclosed. The Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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The invention concerns an air resilience concern with which a place cylinder in a Hublage can be blocked.

In utility vehicles, the demand exists taken in and held is to be named more frequently, that a certain level situation of the drawer area we as an application a drawer ramp, go must over the forklifts on the drawer area of the utility vehicle. With increasing Beladung, the resilience sowed and therewith the vehicle construction on. A possible remedy could be seen therein that one lets run in utility vehicles with air resilience also during the drawer process the motor for the purpose of level regulation. But even in this expense, the vehicle construction shortly would sink or waver in each load change until the given level situation is reached again.

The support arrangements represent a further application in utility vehicles, that become disconnected used against. Vehicles with Kranaufbauten o. ä. control as a rule place cylinder, that must become Exclusively from load in the drawer process. In order to withstand the appearing loads, these place cylinders very strongly must be dimensioned, what reduces the allowable payload.

It is the task of the existing invention of creating a device, that guarantees a constant height of a vehicle construction in standstill of the vehicle and is as simple as possible in the construction.

Invention appropriate for the task is solved through the patent claim 1. By means of the Blockierfunktion of the air resilience, the vehicle construction can become entire stillgesetzt. In addition no worth mentioning energy use is is comparable necessary, that with the permanent motor business for a level regulation. The further the support function can be received at least in boundary also for Fahrzeug with Kranaufbauten. At the same time benefits that the wheels determine the support area and therefore also in difficult terrain an use of the vehicle can be guaranteed.

In an advantageous execution form, the Abstützeinrichtung connected firmly with the carrier disk of the air feather and defines with the Blockierventil the importation position of the piston pole in the place cylinder. Piston pole is therewith part of the cushioned mass. One can use the blockage in each situation of the vehicle construction without having to carry out previously a level rule process.

In an alternative variant, the piston pole in the place cylinder is led swimming and therewith freely mobile. Therefore it is possible that the piston pole of the place cylinder is shorter than the maximal interval between the retirement side of the piston pole out of the place cylinder and the carrier disk of the air feather. One must bear himself in mind that in a drawer process the end resilience condition maximal never enters. Therefore one doesn't have to plan also the piston pole of the place cylinder for this condition with respect to its length.

In further advantageous arrangement, the place cylinder can be carried out as an oscillation mute.

In a piston pole swimming stored relatively to the carrier disk, the position of the piston pole should be defined approximately in order to limit the level rule process to a minimum. In addition a power in end load direction is moved on the piston pole effective, that the piston pole into a planned Blockierstellung. For example the power effective in end load direction can be produced by a pressure cushion in the supply container. Alternatively the possibility offers itself that in the place cylinder a pressure feather is arranged, that influences on the piston pole.

In an air feather, that an especially large volume in purported show should outside measures, shows the piston pole a divided piston up, that subdivides the place cylinder in two working rooms, whereby a working room, that of the air feather adjoining part of the pressure airspace of the further is becomes the druckbeaufschlagte area for the Blockierfunktion larger.

Based on the following figures description, the invention more closely is supposed to be clarified.

It shows:

Fig. 1 Air resilience concern

Fig. 2 Air resilience concern with divided piston in the place cylinder

Fig. 3 air resilience concern with pressure feather and thrush openings.

The fig. 1 shows very strongly simplified an air resilience concern 1. The air resilience concern comprises and a. a roll skin 3 that forms together a pressure airspace 7 with an Abrollrohr 5. At the upper end of the roll skin, a carrier disk 9 is arranged, that serves as a connection at a not represented load work.

The Abrollrohr 5 is delayed on a place cylinders 11 filled with hydraulics medium whereby selectively the Abrollrohr or the place cylinder a connection agency 13 show at the ungefederten measures of the load work. In the place cylinder 11, a piston pole 15 axially mobily is arranged and positioned by a leadership sealing unit 17 radial. The piston pole juts endseitig out of the place cylinder in the pressure airspaces 7. At the from load cash end of the piston pole, an Abstützeinrichtung 19 is secured.

The place cylinder connected over a controllable Blockierventil 21 with a supply container 23. In this representation, the supply container externally is connected, can be used it however also a wrapping container tube so that between the place cylinder and the container tube a supply room stands to the decree.

In the drawer process of a motor vehicle, especially an utility vehicle, the vehicle construction is set through a not represented pressure connection of the air feather to a desired level situation to stand for example around height same with a drawer ramp. In this level situation of the vehicle construction and therewith also the carrier disk 9, the Abstützeinrichtung 19 adjoins at the carrier disk. Over the controllable Blockierventil, a drain of the hydraulics medium is stopped out of the place cylinder into the supply container. It stands a support power in the piston pole as a reaction power on a load of the Luftfederungsanla on, that transfers itself hydraulically in the place cylinder to the volume of the pressure medium, as a rule oily fluid, to egg. In this variant, the piston pole of 15 the place cylinder can be 11 shorter than the maximal interval between the retirement side of the piston pole out of the cylinder and the carrier disk of the air feather because the extreme Ausfederungsw of the air feather must not be carried out by the piston pole of the place cylinder.

The aggregate out of carrier disk, Abstützeinrichtung, piston pole and place cylinder form then a Druckstrebe that hold the vehicle construction dependably in the adjusted level situation.

The fig. An Abwandlung of the fig. shows 2. 1. Same components are with the same reference figures as well as in the fig. 1 accommodate so that only on different features gone in becomes. In this execution form, the piston pole 15 connected with its Abstützeinrichtung 19 firmly with the carrier disk 9, is therefore part of the cushioned mass of the vehicle. At the other end of the piston pole, a divided piston 24 is arranged, is subdivided that the place cylinders 11 in two working rooms 25; 27. The working room adjoining the pressure airspace 27 connected with the pressure airspace 7 and enlarges it therewith. For that a corresponding connection opening 29 is planned in the leadership-sealing unit 17.

In this execution form, the piston pole 15 is always in a position, that enables a Blockierfunktion. Attitudes over the level regulation so that the Abstützeinrichtung adjoins at the carrier disk, are not necessary.

The fig. A combination of the fig. places 3. 1 and 2 there. The working rooms 25, 27 of the place cylinder are separated to be sure through the divided pistons 23, but thrush openings 31 are brought in in the divided piston, related exercise that in a movement of that of the divided piston on the piston pole 15 a Dämpfungswirkung by what means the place cylinder receives the function of an oscillation mute. A pressure feather 33 worries that the piston pole is always toward the carrier disk 9 from loads and takes in a defined Blockierlage of the vehicle construction. Next to the pressure feather in the place cylinder, the supply container can show a pressure cushion 35, that causes an additional end load power for the piston pole.